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TWO CASES OF SMALL OVARIAN TUMOURS SIMULATING UTERINE FIBROID: REMOVAL: RECOVERY.

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[WITH A LITHOGRAPHIC ILLUSTRATION.]

THE two cases which are described in this paper are of considerable clinical and surgical importance. In each, the tumour was small and closely connected with the uterus, so that uterus and tumour moved together. So far, the tumour bore the characters of a uterine fibroid. In each, however, the age of the patient and the relatively rapid growth of the tumour were in favour of ovarian disease, although fibroids may appear in young subjects and grow with rapidity, whilst patients are often mistaken about the rate of growth of tumours. The doubtful nature of the tumour rendered an immediate exploratory operation justifiable. The result proved that, had I waited longer, the risks of operating would have greatly increased. An ovarian tumour cannot be removed too early, and this rule is most important when bimanual exploration and the sound prove that the tumour is closely connected with the uterus. The removal of a large ovarian tumour with a very short pedicle, or no pedicle, is a formidable operation.

E. L., aged 30, a tall, strong woman, married eighteen months previously, but a widow for six months, was admitted into my ward at the Samaritan Hospital in December, 1891. She was a patient of my friend Dr. Chill, of Tollington Park. Two months previously she had noticed a tumour in the hypogastrium towards the right iliac fossa. It grew very rapidly, and for the fortnight preceding admission the patient was troubled by a continual desire for micturition. A firm, spherical, apparently solid mass occupied the lower part of the abdomen, reaching half way up to the umbilicus. The uterus was pushed to the left, the cervix was short, and the sound passed 3 inches upwards and to the left. The tumour extended into the right fornix, and to a less degree into

Douglas's pouch and the left fornix. On placing the patient on her left side, the lower part of the tumour could be pushed up, the right side being much the more movable. The movements of the tumour were communicated to the sound. There was a tender body, evidently the left ovary, under the part of the tumour which pressed downwards in the left fornix. The patient had never been pregnant.

I could not feel certain as to whether this tumour was ovarian or uterine; its rapid growth was in favour of ovarian tumour, but a fibroid sometimes grows quickly. The close connection with the uterus and the length of the cavity of that organ gave all who examined the case a strong suspicion that the growth was uterine. I determined to explore. On December 21st, 1891, I operated, assisted by Mr. Butler-Smythe. Some slightly adherent omentum was detached from the surface of the tumour, which was found to be ovarian. On aspiration, a little ovarian fluid escaped, but I had to break down the semisolid interior of the tumour, and as it remained fixed I enlarged the incision and passed my hand behind the tumour, pushing it out of the pelvis. It was a semisolid tumour of the right ovary, with a broad, short pedicle. I secured the vessels on the outer border of the pedicle and then, after applying a large pressure forceps, transfixed the pedicle and tied it, finally cutting away the tumour.

The left ovary was then drawn up; it burst as I lifted it over the pelvic brim. The pedicle was very short. I applied a ligature by transfixion and cut away the ovary. The peritoneum was freely flushed with hot water. There was great vascularity of the pelvic organs. Uterine hæmorrhage had set in two days before the operation and continued for three days afterwards. The period was due a week later. A drainage tube was inserted into the wound. It was removed in twenty-three hours. The patient made a very good recovery and was discharged on January 18th in perfect health.

The right ovary (Fig. 1), weighed one pound and a-half after much of its contents had been removed during the operation. Its interior consisted of trabeculæ enclosing areolar spaces stuffed with "colloid" material.

The left ovary measured 2 inches by 1⅛ inch, after soaking in spirit. On the site of a kind of cyst which had burst during extraction was a large clot, fading off into the ovarian tissue. There were a few small follicles near the surface, but the inner and middle part of the ovary consisted of a uniform, rather tough stroma. The tube had thickened walls, the ostium was patulous, the fimbriæ well developed.

The microscopic examination of the substance of the tumour into which the right ovary was converted displayed areolar spaces lined with perfect columnar epithelium. The cells were being shed into the interior of the spaces so as to form the "colloid" substance (Fig. 2).

The pathological characters of the tumour have been given in full, for they show how formidable the operation would have proved had it been delayed a few months later. A large areolar cyst, full of actively secreting epithelial elements, and partly burrowing in the pelvis, gives great trouble to the surgeon, especially if adhesions be multiple—and they were beginning to form in this case, although the tumour was still small. In the next case the morbid growth was of a yet more formidable class.

FIG. I.—Tumour. Case of E. L. The numerous areolar spaces were filled with colloid material. Size about half of nature.

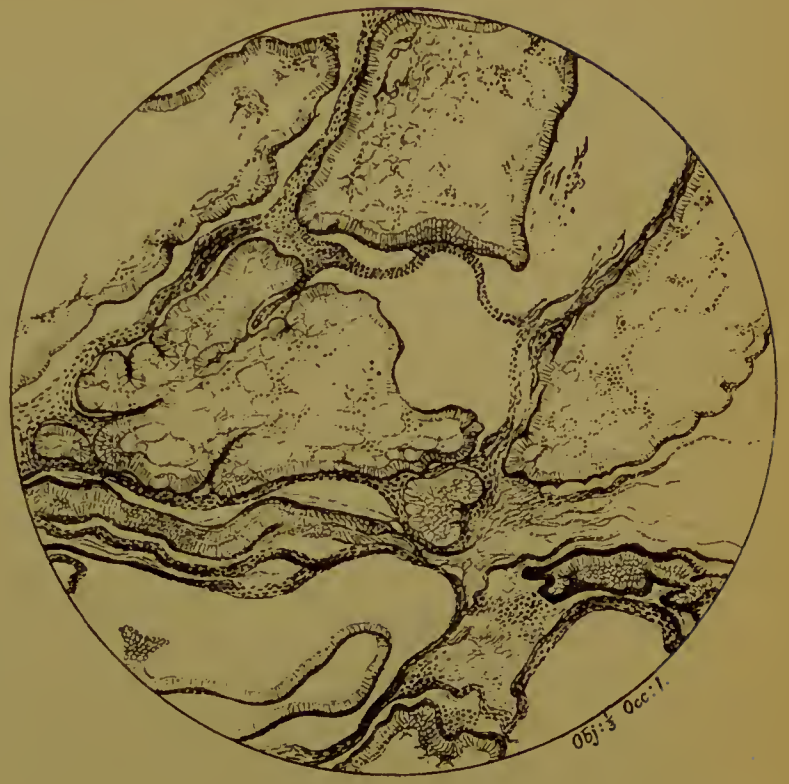

FIG II.—Microscopic section of a portion of the tumour, Fig. I., showing the columnar epithelium investing the walls of the areolar spaces and undergoing the usual degeneration, so as to form the so-called "colloid" material.

FIG III.—Tumour. Case of K. K. The dilated Fallopian tube is seen cut across. A rod has been passed into each segment, and the course of the tube on the outside of the cyst is indicated by dotted lines. On the left the tube is seen opening into the upper cystic cavity of the tumour. Size one-third of nature.

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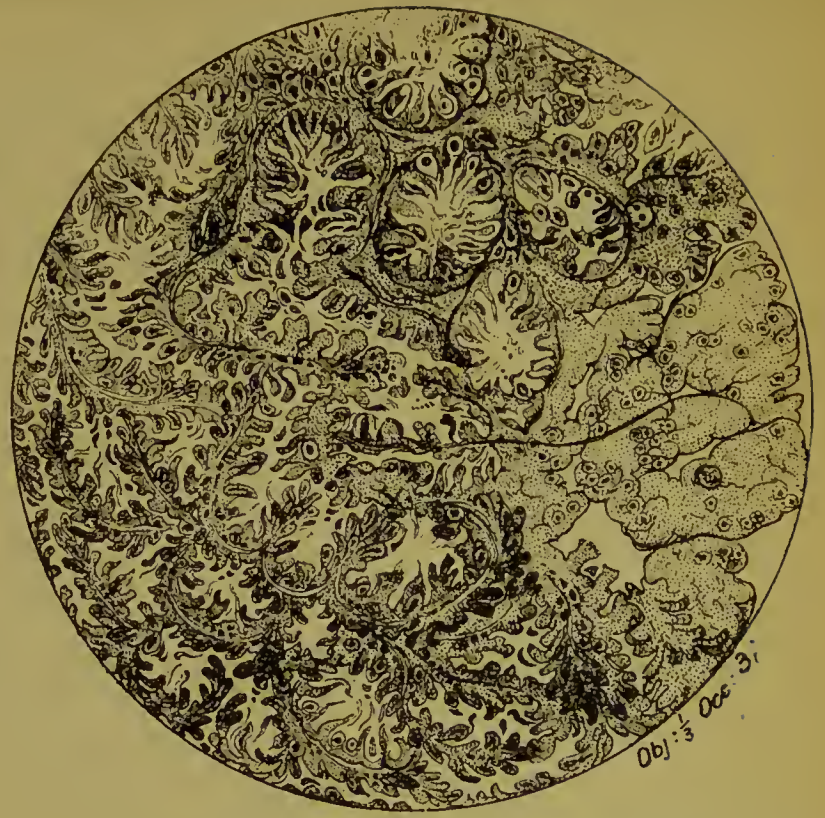

FIG. IV.—Microscopic section from a papillomatous mass growing from the inner wall of the lower cystic cavity of the tumour, Fig. III.

K. K., aged 24, married 6 years, first came under my care in November, 1891. She was short and rather corpulent. She had never borne children nor miscarried; the period was regular with scanty show and little pain. About a year and a-half previously she noticed a swelling just above the pubes. It began to grow shortly before her first visit, and for two months it had caused great pain and prevented her from working. The lower part of the abdomen was filled by (apparently) two firm lobular growths reaching close to the umbilicus. The right, or rather the central, growth was spherical and very movable. The left was of an oblong oval form, lying above the left crural arch. As the abdominal walls were thick with fat and the tumours firm no distinct evidence of fluid could be ascertained manually. The cervix was long and free from any growth, the sound passed $2\frac{1}{2}$ inches forwards; all movements of the sound were communicated to the left tumour.

On January 9th, 1892, I operated with the assistance of Mr. Butler-Smythe. The abdominal walls were very vascular, as is the rule in fibroid disease of the uterus, the exception in typical ovarian cystoma. The omentum had to be detached from the fundus of the uterus and bladder. A tumour was then exposed, which, from its glossy silvery surface on the left side, was evidently ovarian. The two swellings, apparently separate on external examination, were simply lobes of the same tumour. Over the right lobe part of the broad ligament was reflected. It was tapped with the aspirator, but the fluid contents were too thick for removal by that instrument. I had to enlarge the incision, then, on passing my hand behind the tumour, I lifted it out of the brim of the pelvis in which it was engaged. A few pints of thick glairy fluid escaped. The tumour was sessile, and burrowed under the peritoneum, touching the vermiform appendix. I transfixed the tissues at the outer border of the peritoneal connection of the tumour with the pelvis, and tied with No. 2 ligature silk; then I transfixed the base of the broad ligament, whence the tumour had just been enucleated, and tied with No. 3 silk, cutting the tumour away. On the left side was a dilated tube. I detached it from very firm adhesions to the pelvic peritoneum, and drew up the ovary; the appendages were removed, the pedicle being transfixed with No. 3 silk. The long thickened omentum was tied in four places and partly cut away. There was very free hæmorrhage from the pelvis. The peritoneum was flushed with hot water. I then found that the ligature in the right broad ligament had slipped. I transfixed and tied the inner part, including the stump of the tube, placed a large elbowed pressure forceps on the outer part of the pseudo-pedicle, including the No. 2 silk ligature on the outer border, and transfixed and tied again. There was much oozing from the torn adhesions on the left side. The peritoneum was freely flushed with hot water once more. The drainage tube was applied, and the abdominal wound closed.

This patient made a rapid recovery. The vaginal temperature never rose above 100°. During the first twelve hours the drainage tube was emptied every two hours, several drachms of deep red fluid coming away on each occasion. The tube was removed forty-seven hours after the operation. Eight hours later the period commenced, about four days before it was due. As is often the case when enucleation is performed

and a broad false pedicle ligatured, there was considerable pain for the first two days. When the menstrual "show" appeared the pain subsided. The period ceased in four days. On February 4th she was discharged. I saw her on May 24th. She was in very good health, but complained of frequent flushing in the cheeks, a symptom so often seen during the menopause.

The importance of securing separately the large vessels in the outer border of the broad ligament was manifest in this case. Had it not been done, the slipping of the ligature would have caused very serious hæmorrhage. When a tumour is sessile and touches uterine tissue, it is advisable to secure separately the inner border of the broad ligament, including the tube as well. For fatal hæmorrhage may follow should the inner part of the ligature transfixing the broad ligament happen to slip after the operation.

The right ovary weighed 1½ ounces. It was converted into a tumour with a very irregular surface. It was distinctly, though not deeply, divided into two lobes. The broad ligament invested its outer half. A large piece of omentum and two appendices epiploicæ adhered to the surface. The Fallopian tube, elongated and dilated, lay quite sessile on the surface of the cyst. It was divided in opening the cyst; its course is indicated in the drawing (Fig. 3) by two bent rods. The uterine end looked like a small oval excrescence on the tumour. This excrescence was formed by a pale fleshy substance with a few bright yellow specks, which infiltrated the tubal walls. A piece was preserved for the microscope. The tortuous channel of the dilated tube, about 4 inches in length, was lined with plicæ, and opened into the cyst by a wide orifice guarded by a crescentic valve, which was infested with papillomatous growths (Fig. 3).

The interior of the tumour was divided into two almost equal parts by a broad septum of dense fibrous tissue, which included a large clot of the size of an almond. The one half of the tumour was a single cyst, bearing abundant papillomatous growths on its inner wall. The other half, placed uppermost in the drawing, was multilocular. The loculi near the orifice of the tube bore papillomata.

The fleshy substance in the tubal wall consisted of several layers of plain muscle cells in an almost transparent stroma. There were numerous spaces with sinuous margins lined with cubical epithelium. The appearances probably represented old inflammatory infiltration of the tubal walls (interstitial salpingitis), including some of the diverticula from the mucous membrane (Landau, Rheinstein, and Whitridge Williams), or the tubular structures of uncertain nature described by Drs. Ballantyne and J. D. Williams.[1]

Fig. 4 represents a microscopic section of one of the papillomatous growths from the cyst wall. The drawing, like the others illustrating this paper, was made by Mr. Lewin. It shows an abundance of the most perfect papillary growths, as seen under a low power. The papillæ bore cylindrical epithelium, on which I failed to distinguish cilia.

The left ovary weighed 1½ ounce. There was a large, perfectly fresh corpus luteum full of soft dark clot, and half an inch in diameter, close to the ovarian ligament. A similar

[1] Histology and Pathology of the Fallopian Tubes, BRITISH MEDICAL JOURNAL, vol. i, 1891, p. 109.

corpus luteum lay external to the first. The tube was dilated, the ostium effaced; it coiled round the outer part of the ovary, reaching the under side of that organ, as often happens when the tube has been long dilated and adherent. The mucous membrane of the outer surface of the tube lay adherent, to the extent of an inch, to the surface of the ovary, which contained no cysts. Had a cyst existed, it must ultimately have communicated with the cavity of the dilated tube, then the condition would have corresponded to that observed on the right side as above described.

I believe that the disease consisted of papillomatous degeneration of the right ovary after long standing tubo-ovarian inflammation. The left side showed an earlier stage, the tube but not the ovary being cystic. There was no evidence of "ovarian hydrocele," a congenital condition described by Mr. Bland Sutton. The case bore a close resemblance to another which I described and figured in the *Transactions of the Pathological Society*, vol. xxxix, 1888, p. 200. In that instance inflammatory changes in the appendages had set in seven years previously.

It is evident that an operation was even more urgent in this case than in the first. I have seen neglected cases where the papillomatous masses have passed beyond the limits of the cyst and invaded the pelvic viscera, so as to be irremovable. These cases ended fatally, whilst by timely interference in the case here described the patient was restored to perfect health.